

REMARKS

In accordance with the foregoing, the independent claims 8, 11, 16 and 18 have been amended to recite further features of the previously, generically recited "light source module" in each of those claims and which features are respectfully submitted to patentably distinguish the light source module paragraph recitation, and thus all of the independent claims over the art of record.

There being no other objections or rejections, it is submitted that the application is in condition for allowance, which action is earnestly solicited.

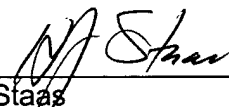
If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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By: _____


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IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please AMEND claims, and ADD new claims, in accordance with the following:

8. (CURRENTLY AMENDED) A scanning apparatus comprising:

a light source module including a laser diode for emitting a laser beam, a circuit board comprising said laser diode, a driving circuit for said laser diode, and a connector for receiving a power supply for driving said laser diode from an electric power source, means for shaping the laser beam emitted by said laser diode and a housing made of electrically insulating material for containing said beam shaping means and said circuit board except for a portion of said circuit board where the connector is mounted;

an optical unit including means for receiving a beam from the light source module and reflecting the beam to provide the scanning beam, means for reflecting the scanning beam to provide a plurality of scanning lines outside of the housing, means for receiving a return beam reflected by an article are sealingly contained, and a housing for enclosing means for receiving and reflecting the beam, means for reflecting the scanning beam, and

means for receiving the return beam; and

the housing including an arrangement for mounting the light source module outside of the housing and an aperture through which the beam ~~entering~~ enters the housing.

9. (ORIGINAL) A scanning apparatus according to claim 8 further comprising a damper member of resilient material provided between the optical unit and the light source module to prevent dust from entering the housing.

10. (ORIGINAL) A scanning apparatus according to claim 9 in which a glass plate is provided to close the aperture in the housing through which the beam enters the housing from the light source module.

11. (CURRENTLY AMENDED) A scanner for emitting a scanning beam, comprising:

~~a light source for emitting a light beam;~~

a light source module including a laser diode for emitting a laser beam, a circuit board comprising said laser diode, a driving circuit for said laser diode, and a connector for receiving a power supply for driving said laser diode from an electric power source, means for shaping the laser beam emitted by said laser diode and a housing made of electrically insulating material for containing said beam shaping means and said circuit board except for a portion of said circuit board where the connector is mounted;

an optical unit including an optical element for receiving the light beam from the light source module and for producing a scanning beam, and a housing for enclosing the optical element, the housing including an aperture through which the light beam enters the housing;
and

the light source module being mounted to the exterior of the housing of the optical unit to direct the beam to the optical elements within the housing through the aperture.

12. (CURRENTLY AMENDED) A scanner according to claim 11, in which the optical unit including a scanning mirror for producing a scanning beam, a plurality of mirrors for reflecting the scanning beam and for dividing the scanning beam into first and second sets of scanning beam segments, an optical receiver element for receiving the return beam reflected by a bar code to produce an electrical signal responsive to the return beam, and a housing for enclosing the scanning mirror, the plurality of mirrors, and the optical receiver element, the housing including an aperture, and first and second openings through which the first and second sets of scanning beam segments propagate outside of the housing to provide first and second sets of scanning lines outside of the scanner,

the light source module being secured to the exterior of the housing to direct the light beam to the scanning mirror through the aperture provided in the housing.

13. (ORIGINAL) A scanner according to claim 12, in which the scanner mirror is a rotating polygonal mirror.

14. (CURRENTLY AMENDED) A scanner according to claim 11, in which the optical unit including a scanning mirror for producing a scanning beam, a plurality of mirrors for reflecting the scanning beam and for dividing the scanning beam into a set of scanning beam segments, an optical receiver element for receiving the return beam reflected by a bar code to produce an electrical signal responsive to the return beam, and a housing for enclosing the scanning mirror, the plurality of mirrors, and the optical receiver element, the housing including an aperture, and an openings through which the set of scanning beam segments propagate outside of the housing to provide a set of scanning lines outside of the scanner,
the light source module being secured to the exterior of the housing to direct the light beam to the scanning mirror through the aperture provided in the housing.

15. (ORIGINAL) A scanner according to claim 14, in which the scanner mirror is a rotating polygonal mirror.

16. (CURRENTLY AMENDED) A bar code scanner for reading a bar code, comprising:

~~a light source for emitting a light beam;~~

a light source module including a laser diode for emitting a laser beam, a circuit board comprising said laser diode, a driving circuit for said laser diode, and a connector for receiving a power supply for driving said laser diode from an electric power source. means for shaping the laser beam emitted by said laser diode and a housing made of electrically insulating material for containing said beam shaping means and said circuit board except for a portion of said circuit board where the connector is mounted;

an optical unit including a scanning mirror for producing a scanning beam, a plurality of mirrors for reflecting the scanning beam and for dividing the scanning beam into first and second sets of scanning beam segments, an optical receiver element for receiving the return beam reflected by a bar code to produce an

electrical signal responsive to the return beam, and a housing for enclosing the scanning mirror, the plurality of mirrors, and the optical receiver element, the housing including an aperture, and first and second openings through which the first and second sets of scanning beam segments propagate outside of the housing to provide fist and second sets of scanning

lines outside of the scanner,

the light source module being secured to the exterior of the housing to direct the light beam to the scanning mirror through the aperture provided in the housing.

17. (ORIGINAL) A bar code scanner according to claim 16, in which the scanner mirror is a rotating polygonal mirror.

18. (CURRENTLY AMENDED) A bar code scanner for reading a bar code, comprising:

~~a light source for emitting a light beam;~~

a light source module including a laser diode for emitting a laser beam, a circuit board comprising said laser diode, a driving circuit for said laser diode, and a connector for receiving a power supply for driving said laser diode from an electric power source, means for shaping the laser beam emitted by said laser diode and a housing made of electrically insulating material for containing said beam shaping means and said circuit board except for a portion of said circuit board where the connector is mounted;

an optical unit including a scanning mirror for producing a scanning beam, a plurality of mirrors for reflecting the scanning beam and for dividing the scanning beam into a set of scanning beam segments, an optical receiver element for receiving the return beam reflected by a bar code to produce an electrical signal responsive to the return beam, and a housing for enclosing the scanning mirror, the plurality of mirrors, and the optical receiver element, the housing including an aperture, and an openings through which the set of scanning beam segments propagate outside of the housing to provide a set of scanning lines outside of the scanner,

the light source module being secured to the exterior of the housing to direct the light beam to the scanning mirror through the aperture provided in the housing.

19. (ORIGINAL) A bar code scanner according to claim 18, in which the scanner mirror is a rotating polygonal mirror.